Rep. Edward Vigil, Chair Rep. Randy Fischer Rep. Libby Szabo

Sen. Gail Schwartz, Vice-Chair Sen. Randy Baumgardner Sen. Angela Giron



CAPITAL DEVELOPMENT COMMITTEE

State Capitol Building, Room 029 Denver, Colorado 80203-1784 (303) 866-3521



September 24, 2013

Representative Max Tyler Chair, Joint Technology Committee 200 East Colfax Avenue Denver, Colorado 80203

Dear Representative Tyler:

House Bill 13-1079, which established the Joint Technology Committee (JTC), directs the JTC to submit a written report on the JTC's findings and recommendations about capital budget items related to information technology to the Capital Development Committee (CDC). Specifically, the bill authorizes the JTC to make recommendations concerning state agency capital budget requests for information technology for the next fiscal year that have been approved by the Office of Information Technology or the Office of State Planning and Budgeting. Such recommendations may include the basis for approval, findings or comments on one or more budget requests, and a suggested prioritization of such budget requests.

The CDC received the FY 2014-15 capital budget submission from the Governor's Office of State Planning and Budgeting on September 3, 2013. The submission included three information technology project requests, including: (1) Electronic Health Record and Pharmacy System Replacement, Department of Human Services; (2) eLicense Implementation, Department of Agriculture; and (3) Workers' Compensation Mainframe Migration and Modernization Project, Department of Labor and Employment. The CDC will hear a presentation about each of these projects at its annual hearings in December. The CDC welcomes the input of the JTC regarding these requests, particularly if there are areas of concern or questions about the proposed projects. The CDC respectfully requests that the JTC submit any feedback about the projects prior to the beginning of the CDC's annual hearings on Monday, December 2. If no response is submitted by the JTC, the CDC will proceed with its normal project review.

A copy of the three information technology project requests is appended. If you have any questions or concerns please call Kori Donaldson, Legislative Council Staff, at 303-866-4976.

Sincerely,

Edward VV

Representative Ed Vigil Chair, Capital Development Committee Representative Tyler, Chair September 24, 2013 Page 2

c: Capital Development Committee Members
Joint Technology Committee Members
Jessika Shipley, Joint Technology Committee Staff
Matt Kiszka, Joint Technology Committee Staff
Kori Donaldson, Capital Development Committee Staff
CDC File

| | GC-IT | : C/ | APITAL CON | STRU | JCTION INF | ORMATION TEC | HNC | LOGY REQU | EST FOR FX-20 | 14-1 | 5 | | |
|------------|---|---------|-------------------------|-------------|-------------------------------|---|----------------|---------------------------------------|-----------------------|-------------|--------------------------------------|-----------------|-----------------------|
| | Agency or Institution: | Agri | iculture | | | Department or | instit | Signature ution Approvat: | (// | 1 | 2 | 2 | =/6/3 |
| | Project Title | eLic | eLicense Implementation | | | Signature CCHE Approval: | | | , | | | Date | |
| | Project Year(s): | FY 2 | FY 2014 - 15 | | | ************************************** | | Signature OIT Approvat: | | | | Date | |
| | Agency or Institution Priority Number: | 1 | | | | | C | Signature SPB Approval: | Gr. 127 | | X | | 8/30/13 |
| | | | | | <u>-</u> | Name and e-mail : | | | Jeff Stalter Jeff Sta | iter@: | state.co.us | (JRIS | 1200 |
| Ŧ | vision? Yes No | т | otal Project Costs | | ai Prior Year propriations | Current Request FY 2014-15 | Ϋ́́ | ar 2 Request | Year 3 Request | Ye | ar 4 Request | Year 5 | Request |
| A | Land Acquisition | | | | | | | | | | | | |
| 111 | Land /Building Acquisition | \$ | | \$ | | \$1 000 1 mm (+ m) | S | | \$. | \$ | | \$ | |
| В. | Contract Professional Servicus | | | 22 WIA. | | | | · · · · · · · · · · · · · · · · · · · | * | - | | | |
| (3) | Consultants/Contactors | 3 | | \$ | | '\$ artyve'. € | S | | \$ - | \$ | - | \$ | |
| 121 | Quality Assurance | 5 | _ | S | + | Santa and a | S | - | \$ - | \$ | | \$ | |
| (3) | Independent Verification and Validation (IV&V) | \$ | - | \$ | • | \$ 50 S Y 12 T | \$ | _ | \$ - | \$ | ~ | \$ | • |
| | Training | 5 | - | \$ | | ្នាស់ស្ន [ា] ស្នាក់ក្ | \$ | • | \$ 4 | \$ | * | \$ | - |
| | Leased Space (Temporary) | \$ | | S | - | \$70 km km x | \$ | | \$ - | \$ | | \$ | - |
| | Feasibility Study | 3 | | S. | - | \$ 100 100 100 | \$ | - | \$ - | \$ | | \$ | - |
| | Inflation for Professional Services Inflation Percentage Applied | \$ | | 2 | 0.00% | 0.00% | \$ | 0,00% | \$ - | \$ | 0.00% | \$ | |
| | Other Services/Costs | \$ | | 3 | 0,00% | \$ | \$ | 0,00% | %00.0 % | \$ | 0.00% | š | 0,00% |
| | Total Professional Services | \$ | - | \$ | - | • | \$ | - | \$ - | \$ | - | \$ | |
| C. | Associated Bullding Construction | | | | | | | | | <u> </u> | | | |
| 11) | (a) New (GSF): | \$ | · | \$ | - | \$ 17 to 15 to 14 | \$ | - | \$ - | \$ | - | \$ | - |
| ļ | New \$ /GSF (b) Renovate GSF: | | Section 1 | | | | | | | | | | THE PROPERTY. |
| 121 | Renovate \$ /GSF | \$. | el aproposition of | S | - -bliban-aries | \$ | \$ | - | \$ - | \$ | e Partingstanting and finding and | \$. | 6835-861 865-71 |
| (2) (3) | Site Work/Landscaping | THE WAR | | racera. | | | and the second | | 这种种种的 | Delivery. | entrant production | | (100 年) 10 mg |
| (4) | Other (Specify) | S | | \$ | 2-9-40 (| A 4 5 4 6 1 4 7 1 1 | \$ | A STOREST AND STORES | 8 . | Ş | eta ka menedikan endakka talan bakik | 阿斯勒斯克·斯斯 | W. L. L. Co. S. P. L. |
| (5a) | | 5 | - | S | - | | \$ | | \$ | \$ | - | \$ | |
| (5b) | Inflation Percentage Applied | | | | 0,00% | \$0.00% | | 0,00% | 0,00% | | 0,00% | In- | 0,00% |
| (G) | Total Construction Costs | \$ | | \$ | • | 建设建作业的产品联 | \$ | • | \$ - | \$ | - | Ş | |
| p., | Software Acquisition | | | | | | | | | | | | |
| 141 | Software COTS | \$ | 700,000 | \$ | | \$ 700,000 | S | | \$ - | 1 8 | | | |
| | Software Built | \$ | 700,000 | \$ | - | \$ 700,000 | .): S: | | \$ - | Ş | | \$ | 4 |
| | Inflation on Software | \$ | | \$ | | \$ 77 (8 77 18 77 18 | 3 | | \$ - | \$ | | \$ | |
| | Inflation Percentage Applied | | | | 0.00% | 0.00% | = | 0,00% | 0.00% | + | 0.00% | <u> </u> | 0.00% |
| (5) | Total Software | \$ | 700,000 | \$ | - | 5 7.00,000 | \$ | - | \$ - | \$ | 4 | \$ | - |
| E. | Equipment | | | | | | | | | | | | |
| (1) | Servers | \$ | | \$ | | \$15517 2013 5121 | \$ | | \$ - | s | | \$ | |
| | PCs, Laptops, Terminals, PDAs | Ş | - | Ş | - | s */ 1888 4 8 | 3 | | \$ - | \$ | | \$ | - _ |
| | Printers, Scanners, Peripherals | 149 | | \$ | ۲ | \$00000000000000000000000000000000000000 | \$ | • | \$ - | \$ | | s | <u>.</u> |
| [4] | Network Equipment/Cabling | Ş | | \$ | - | S. Centificati | \$ | - | \$ - | \$ | | 5 | |
| | Other (Specify) | Ş | | \$ | | · \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | \$ | | \$ - | \$ | | \$ | |
| | Miscellaneous | \$ | - | \$ | | S TENNESSEE | \$ | - | \$ | \$ | | \$ | |
| | Total Equipment and Miscellaneous Costs | \$ | ٠ | \$ | - | | \$ | - | 5 - | \$ | × | . 2 | |
| | Total Project Costs | \$ | 700,000 | \$ | | :S:: XXXX:: 700,000; | \$ | | \$ - | \$ | | \$ | |
| | Project Contingency | | | | | | | | | | | | |
| | 5% for New | \$ | - | \$ | | \$ 1000 | | | \$ - | ź | | \$ | - |
| | 10% for Renovation | - 5 | - 1 | \$ | - | \$ 2000000 | \$ | <u> </u> | \$ - | \$. | - | Ş | |
| | Total Contingency | \$ | - | \$ | ч. | 事情的政治政治 | | • | \$ - | \$ | - | \$ | - |
| | Total Budget Request [F+G(3)] | \$ | 700,000 | Ş | - | \$ 700,000 | \$ | - 1 | Ş . | \$ | - | \$ | - |
| - | Source of Funds | | · | | | | | | | | | | |
| | CCF | | - | \$ | | ·\$: Superfluence of | \$ | - 1 | \$ - | \$ | | Ş | - |
| | CF | Ş | 700,000 | \$ | - | \$ 12 700,000 | \$ | - | \$ - | 35 | - | \$ | - |
| <u> </u> | RF | | | <u>\$</u> | - | ·\$-%@f-### | \$ | - | \$ - | \$ | .+ | \$ | • |
| | FE | \$ | - 1 | 5 | | \$ 25 5 5 5 5 5 | Ş | - 1 | \$ - | \$ | _ | \$ | • |



DEPARTMENT OF AGRICULTURE

John W. Hickenlooper Governor

FY 2014-15 Capital Construction Request September 1, 2013 John T. Salazar Commissioner

Signature

Date

Department Capital Construction Priority: 01 eLicense Implementation

| Summary of Capital Construction Request | Total Funds | CCFE | Cash Funds | Federal Funds |
|---|----------------|------|---------------|------------------|
| FY 2014-15 | \$700,000 | \$0 | \$700,000 | \$0 |

Request Summary:

The Department is requesting \$700,000 cash fund spending authority for the configuring and deployment of the Irondata/CAVU eLicense program currently in use by the Department of Regulatory Agencies (DORA). The eLicense program will automate the annual processing of approximately 40,000 permits, license applications, and renewals for eggs, scales, meat processing, pesticides, organics, and pet animal care facilities, just to name a few. In addition, the system will automate the process for developing high risk inspection frequency, and the process of issuing notices of violation. Department customers will, in most cases, receive their permits and licenses instantly, eliminating the need for paper applications which are mailed in to the Department, processed manually, and finally resulting in a paper permit being mailed back to the customer.

Background and Justification:

The Department has been working towards this outcome for the past few years. Initially, the Department built a complex Access database to consolidate licenses with the long-term goal of developing a web portal for customers to request and pay for licenses and permits. Unfortunately, the complexity of each program that was to be added to the system was beyond the capabilities of this solution. Therefore, the Department underwent a Lean event in the fall of 2012 to streamline its license and permit processes. During this event, OIT and DORA demonstrated the Irondata/CAVU eLicense system and, immediately following the demonstration, the Department reached out to the Statewide Internet Portal Authority (SIPA) to request the system be made available for Agriculture customers.

The eLicense solution will allow customers to request permits, to include renewals, online. Customers will submit all the required information and pay for the permit online, and, in most cases, customers will receive their permit electronically unless the permit application requires further review by program personnel.

This proposal is a stark contrast from the Department's current business model. Programs mail hard copy renewal applications to current permit/license holders who then complete the form and resubmit via mail back to the program with payment. The forms and payment are then checked against current records manually and, if approved, program staff mails a hard copy permit back to the applicant. This process costs

the Department thousands of dollars annually in paper and postage costs, not to mention staff time for review and processing.

Project Description:

The eLicense program is currently being deployed by DORA. Other agencies moving to this solution include the Division of Real Estate and Education. The system is endorsed by OIT and SIPA and is already built and ready for use. The Department is undergoing a requirements phase to determine how to configure the system for Department specific programs such as pesticide registration, nursery and seed, scales, eggs, meat, certified organics, and chemigation to name a few.

The Department will fund the full cost of the system rather than assess an additional transaction fee to customers for use of the system. Cash fund balances of the various programs are sufficient to cover the expenditure; therefore, the Department will not pass the expense on to the agricultural industry that has, essentially, already paid for this solution. Fee increases will not be necessary to support this solution as the cost savings in printing and postage will help offset the annual cost of the system, estimated at approximately \$15,000.

Implementation of the system is scheduled for late spring or summer of 2014. The Colorado Agricultural Commission has already promulgated rule changes to move some license/permit renewal dates to accommodate the change. The rule changes were cost neutral to the agricultural industry and there were no changes in fee structure.

In addition to processing licenses and permits, the system will allow for real-time processing, tracking, and reporting of enforcement actions. Inspectors in the field will have access to the online database of license holders, eliminating the manual process of reviewing high risk permit holders and developing an inspection schedule. The system can be configured to develop the schedule, providing more time for inspectors to be in the field rather than in the office.

Consequences if not Funded:

The Department will continue with manual operations. Paper applications and renewals will be sent via mail, completed by the customer and returned to the program for manual processing. The current process is inefficient and wasteful, costing the Department approximately \$40,000 in printing, supplies, and postage alone.

Operating Budget Impact:

This solution is cost neutral. Elimination of paper, printing, and postage will save the Department an estimated \$40,000, which will be used to cover the cost of annual license agreements for use of the system.

Assumptions for Calculations:

The Department is working with the vendor to complete the requirements phase of the project and until this phase is complete a total cost is unknown. However, an early estimate for configuration and deployment is approximately \$700,000, which may change slightly pending the outcome of the requirements phase. The Department will coordinate with OSPB and CDC staff once the final figure has been determined.

Initial operating savings is estimated at \$40,000. The number of applications and renewals has trended upwards of the past few years from the baseline \$30,000 established in 2010.

| ADDITIONAL REQUEST INFORMATION | | | | |
|---|-----|-----------|----------|-----------------|
| Date of project's most recent program plan: | N/A | k. | | |
| Request 6-month encumbrance waiver? | | Yes | Ø | No |
| New construction or modification? | Ø | New | | Renovation |
| | | Expansion | | Capital Renewal |
| Total Estimated Square Footage | | ASF | <u> </u> | GSF |
| Is this a continuation of a project appropriated in a prior year? | a | Yes | Ø | No |
| If this is a continuation project, what is the State Controller Project Number? | | | | |

| ESTIMATED PROJECT TIME TABLE | | | | | | | | |
|------------------------------|-------------|-----------------|--|--|--|--|--|--|
| Steps to be completed | Start Date | Completion Date | | | | | | |
| Requirements Phase | Spring 2013 | Summer 2013 | | | | | | |
| Configuration | Winter 2013 | Spring 2014 | | | | | | |
| Deployment (go-live) | Spring 2014 | Summer 2014 | | | | | | |

| CASH FUND PROJECTION | NICHTAN | Salar in Francisco State | | | | | | |
|---|------------------|--------------------------|--|--|--|--|--|--|
| ن المراجعة ا | | 1 22T 4 | War and Francisco | J | | | | |
| Cash Fund name and numb | | | 22L, Agricultural Management Fund | | | | | |
| Statutory reference to Cash | | 35-1-106.9 | | | | | | |
| Describe how revenue accr | ues to the fund: | Interest fr | om Unclaimed Property | A 14 14 14 14 14 14 14 14 14 14 14 14 14 | | | | |
| Describe any changes in recollections that will be necessarily this project: | | None. | | | | | | |
| FY 2012-13 Actual FY 2013-14 P Ending Fund Balance Ending Fund | | | FY 2014-15 Projected Ending Fund Balance with Project Approval | FY 2015-16 Projected Ending Fund Balance with Project Approval | | | | |
| \$2,272,934 | S | 2,200,000 | \$2,100,000 | \$2,300,000 | | | | |
| CASH FUND PROJECTION | DNS - | | | | | | | |
| Cash Fund name and numb | er: | 16R. Insp | ection and Consumer Serv | ices | | | | |
| Statutory reference to Cash | Fund: | 35-1-106.5 | | | | | | |
| Describe how revenue accr | ues to the fund: | Fees | | | | | | |
| Describe any changes in re- collections that will be nece this project: | | None. | None. | | | | | |
| FY 2012-13 Actual FY 2013-14 P Ending Fund Balance Ending Fund | | • | FY 2014-15 Projected Ending Fund Balance with Project Approval | FY 2015-16 Projected Ending Fund Balance with Project Approval | | | | |
| \$3,043,193 | \$ | 2,050,000 | \$1,900,000 | \$1,700,000 | | | | |
| CASH FUND PROJECTION | DNS _E | | | | | | | |
| Cash Fund name and numb | er: | 23S, Plant | Health, Pest Control, and | Environmental | | | | |

| , , , , , , , , , , , , , , , , , , , | | Protection | 1 | | | | | |
|--|-----------------------------|------------|--|--|--|--|--|--|
| Statutory reference to Cash Fund: | | 35-1-106.3 | } | | | | | |
| Describe how revenue accr | ues to the fund: | Fees | Fees | | | | | |
| Describe any changes in revenue collections that will be necessary to fund this project: | | None. | | | | | | |
| FY 2012-13 Actual Ending Fund Balance | FY 2013-14 F Ending Fund | | FY 2014-15 Projected Ending Fund Balance with Project Approval | FY 2015-16 Projected Ending Fund Balance with Project Approval | | | | |
| \$3,793,907 | | \$3,950,00 | \$3,750,000 | \$3,600,000 | | | | |



State of Colorado Governor's Office of Information Technology Kristin D. Russell, Secretary of Technology and Chief Information Officer



TO:

Jeff Stalter

Colorado Department of Agriculture Director, Budget & Business Operations

FROM:

Douglas N. Beck, IT Director (OIT), Colorado Department of Agriculture

DATE:

July 13, 2013

SUBJECT:

CAVU/Irondata eLicense system. This system is in place at

DORA with Real Estate and Education to follow.

Jeff,

OIT has reviewed and provided approval of the request to move all Colorado Department of Agriculture licensing activity to the CAVU System in use at the Department of Regulatory Affairs (DORA), with the understanding that some technical issues may require further investigation by OIT, and the outcome of those investigations may cause a revision to the calculations and an increase in the requested funds. These investigations, if necessary, will be completed within 30 days of receiving the final "Scope" of the project, and any changes resulting from those investigations will be forwarded immediately to the Office of State Planning and Budget (OSPB).

Thanks,

Douglas N. Beck

Information Technology Director

Governor's Office of Information Technology.

in a feel to



| | | | | ORMATION TECH | | EST FOR FY 20 | 14-15 | |
|-------------------------|--|--|---------------------------------------|---|--|------------------------|------------------------------------|---|
| | Agency or Institution: Behavioral Health, MHI Division Mental Hiealth Institutes' Electronic | | Department or | Signature Institution Approval: | | | Date \$ 28.[3 | |
| 湿 | Project Title | Mental Health Institu Health Record and F Replacement | | | Signatura CCHE Approval | 7 00 0 | | Date |
| | marthagen in a miles a tomat make properties | FY 2015 - FY 2016 | | | Signature OIT Approval | | | (Cuin |
| 流流 | Agency or Institution Priority Number | 2 | | | Signature OSPB Approval: | Emil H | 1// | Sel30/17 |
| | | , , , , , , , , , , , , , , , , , , , | · · · · · · · · · · · · · · · · · · · | Name and e-mail | address of preparer | David Poulin, david. | poulin@state.co.us | • |
| | Islan? Yes No | Total Project Costs | Total Prior Year Appropriations | Current Request FY 2014-15 | Year 2 Request | Year 3 Request | Year 4 Request | Year 5 Request |
| | Land Acquisition | | | | | | | |
| U, | Land (Building Acquisition | 5 - | \$ | | \$ | \$ - | \$ - | 1 \$ |
| ₿ | Contract Professional Services | | | | | | | |
| (1) | Consultants/Contactors (P.M. & | \$ 832,000 | 3 - | \$ 416,000 | \$ 416,000 | \$ - | \$ - | \$ - |
| | P.M.A.) | \$ - | s . | ALCOHOLOGICAL STATES | S - | 5 - | \$ - | s - |
| | Quality Assurance Independent Ventication and | \$ 624,000 | 5 - | \$ 312,000 | 5 312,000 | \$ - | \$ - | \$ |
| | Validation (V8V) | | | 2000年 | | <u> </u> | ļ <u>.</u> | ļ |
| | Training Lessed Space (Temporary) | \$ 72,000 | \$ - | \$ 57,600 | \$ 14,400 \$ - | \$ - | <u>s</u> - | <u> </u> |
| | Leased Space (Temporary) Feasibility Study | 5 - | \$ - | | \$ - | 5 - | 5 - | 5 - |
| 7a) | Inflation for Professional Services | 5 - | \$ - | STEEN SELVICE | \$ - | \$ - | \$. | s - |
| | Inflation Percentage Applied | | 0.00% | | 0.00% | 0.00% | 0.00% | 0.505 |
| | Other Services/Costs Total Professional Services | \$ - \$ 1,528,000 | \$ - | \$ 785,600 | 5 742,400 | \$ - | 5 - | \$ ~ |
| Ç∰. | Associated Building Construction | กลังและได้ - ประสาริสเตรีย | | | l Calaldaliana | | | Valencia kara |
| | (a) New (GSF): | S - | Same and Angle Assument | / * | S - | | S - | 15 - |
| | New \$ /GSF | | | | | Control of the Control | | 2073/4/14/2/65/02 |
| | (b) Renovate GSF: 904,452 | \$ 1,287,994 | | \$. 1,287,984 | | \$ - | \$ - | 5 - |
| | Renovate \$ /GSF | | | | | | | |
| | Site Work/Landscaping Other (Specify) | \$ | \$ - | 1 S 10 42 50 74 70 F 15: | | S - | 5 - | Selber Colours (rough (Selber Strait Astron |
| (5a) | | \$ - | S - 0.007 | 0.00% | 5 ~ | s - | \$ - | \$ 0.00 |
| (8) | Total Construction Costs | \$ 1,287,994 | 5 . | \$ 1,287,994 | S - | \$ - | \$ - | <u> </u> |
| Ď. | Software Acquisition | | 1 - 2020-01-11-10-11-19 | | | *(· · \ -) * (| 16 16145555304 | ************************************** |
| | 公共的政治中国共和国共和国共和国 | 444977 | | | BEN 1884 (1975) | | | |
| (1) (2) | Software COTS Software Bull! | \$ 11,110,772 \$ - | \$ | 7,264,296 | \$ 3,846,478 | 3 - | <u> </u> | <u> </u> |
| (4a) | Inflation on Software | \$ - | \$ - | "看得我们是20年 | | S - | 5 - | s - |
| (4b) | Inflation Percentage Applied | | 0.00% | Y00.0 | 9,00% | 0.00% | 0.009 | 6 0.00 |
| (5) | Total Software | \$ 11,110,772 | 5 . | \$ 7,254,296 | \$ 3,846,476 | 5 - | \$ - | [5] |
| Ē | Equipment | | | | | | 學的學可是學 | 学性语言的 |
| (1) | Servers | 5 - | \$ | [1] 西语图图 [1] [1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2 | \$ - | 1 | s - | \$ - |
| (2) | PCs, Laptops, Terminals, PDAs | \$ 80,458 \$ 4,926 | | \$50,000 40,228 | | | | |
| (3) (4) | Printers, Scanners, Peripherals Network Equipment/Cabling | S 4,926 | \$ - | \$ 2,463 | 5 2,463 : \$ - | \$ - | 5 4 | s - |
| (5) | Other | 5 - | S - | PATRAGE PARTY | | | \$ - | 5 - |
| (6) | Miscellaneous | <u> </u> | \$ - | 15 C CARECTO 12 | | \$ - | S - | \$ |
| | Total Equipment and Miscellaneous Costs | | | \$777-242,891 | i- | 1 | ļ\$. | \$. |
| F. | Total Project Costs Project Contingency | \$ 14,012,148 | | \$ 9,380,581 | | | S - | Security of the second |
| | THE PROPERTY AND ADDRESS OF THE PARTY OF THE | 40年中的日本 | 通用 计写象 | | | | | |
| G. | the Miller of Age of the Contract of the Contr | P 1900 000 | | | OLD 233 578 | 1 5 - | \$ - | \$ - |
| (1) | 5% for New | \$ 700,607 | | \$ 469,029 | | | | |
| (1) (2) | 5% for New 10% for Renovation | \$ 700,607 \$ \$ 700,607 | \$ - | \$ 469,029 | \$ - | 5 | \$ - | |
| (1) | 5% for New | \$ 700,607 | \$ - \$ - | 1章 不过的 化铁线电流 | \$ - \$ 231,578 \$ 4,863,145 | 5 - 5 - | \$ - \$ - \$ - | \$ \$ |
| (1) (2) (3) | 5% for New 10% for Renovation Total Contingancy | \$ 700,607 \$ - \$ 700,607 | \$ - \$ - | \$ 469,029 | \$ - \$ 231,578 | 5 - 5 - | \$ - \$ - | \$ \$ |
| (1) (2) (3) Hi | 5% for New 10% for Renovation Folal Conlingancy Total Budget Request [F+G(3)] Source of Funds | \$ 700,607 \$ 700,607 \$ 14,712,755 F \$ 14,712,755 | \$ - \$ - \$ - \$ - | \$ 469,029 \$ 9,849,810 \$ 9,849,810 | \$ 231,578 \$ 4,863,145 \$ 4,863,145 | 5 | \$ - \$ - \$ - \$ - | \$ - \$ - \$ - |
| (1) (2) (3) H: | 5% for New 10% for Renovation Total Contingancy Total Budget Request [F+G[3]] Sourse of Funds CC CC | \$ 700,607 \$ - \$ 700,607 \$ 14,712,755 | S | \$ 469,028 \$ 9,849,810 | \$ 231,576 \$ 4,863,145 \$ 4,863,145 | 5 5 | S - | \$ - \$ - \$ - |



DEPARTMENT OF HUMAN SERVICES

John W. Hickenlooper Governor

FY 2014-15 Capital Construction IT Request September 1, 2013 Reggie Bicha Executive Director

Department or CCHE Capital Construction Priority: 02
Mental Health Institutes' — Electronic Health Record and Pharmacy System Replacement

| Summary of Capital Construction Request | Total Funds | CCF | Cash Funds | Federal Funds |
|---|----------------|-------------|---------------|------------------|
| FY 2014-15 | \$9,849,610 | \$9,849,610 | \$0_ | \$0 |
| FY 2015-16 | \$4,863,145 | \$4,863,145 | \$0 | \$0 |
| FY 2016-17 | \$0 | \$0 | \$0 | \$0 |

Request Summary:

The Colorado Department of Human Services (CDHS), Office of Behavioral Health (OBH), requests \$9,849,610 Capital Construction Fund in FY 2014-15. The request is to replace the current legacy health information management systems (Clinical, Lab, Pharmacy and Dietary) used by the Mental Health Institutes (operated by the Office of Behavioral Health (OBH), and located at Pueblo and Fort Logan, with a comprehensive, fully-integrated Electronic Health Record (EHR) system that meets Federal regulatory and reimbursement standards. In addition to the initial software purchase, installation and training costs, the request also includes costs for required improvements to the network infrastructure, additional hardware, and continuing costs for vendor support and software licenses.

Background and Justification:

Resulting from a May 2011 audit, CDHS accepted the Office of the State Auditor's recommendation that the Institutes pursue the implementation of an EHR and replace the legacy pharmacy system to address problems identified in medication prescribing and monitoring, as well as improve clinical decision-making, reduce medical errors, and increase efficiencies. The rate of medication errors at both Mental Health Institutes (8.2 error events per 100 episodes of care at Fort Logan, and 5.6 at Pueblo, averaging the last 12 months) is typically more than twice that reported by other psychiatric facilities to the National Research Institute. An EHR system and new pharmacy system would eliminate transcription errors, which are the leading cause of medication errors. Other hospitals that have implemented EHR systems have significant reductions in medication errors. For example, the University of Texas, Harris County Psychiatric Center eliminated nursing transcription errors and reduced all medication errors by 89 percent within three months after implementing an EHR.

Additionally, a fully-integrated EHR will automatically tie patient treatments to patient outcomes (e.g., specific medications and therapies resulted in specific improvements in each patient's condition), and will directly assist clinical efforts to address the patients' mental illnesses and aggression that drive assaults, the need for seclusion and restraint, and that lengthen hospitalization. CDHS's C-Stat performance measures that will be positively impacted by a modern EHR include: Seclusion Hours per 1,000 Patient Hours; Restraint Hours per 1,000 Patient Hours; Staff Injuries Related to Seclusion and Restraint; Staff and Patient

Injuries Requiring Medical Intervention Due to Assault; and the Lengths of Stay of Currently Enrolled and Discharged Restoration and Competency Exam Patients.

Without an EHR, the Institutes will continue to struggle in monitoring the quality, quantity, and effectiveness of patient treatment, and will be out of compliance with State Audit recommendations. Improvements in medication practices will be less attainable without a permanent, reliable solution to medication errors and clinical-coordination challenges without implementation of a modern, fully-integrated EHR to monitor and manage the clinical operations of the Institutes.

In addition, as most of the State's community mental health centers and community providers implement EHRs, the Institutes will be unable to share vital patient information about patients that often move from the community, to the Institutes, and back to the community. Thus, the ability to provide adequate continuity of care is greatly compromised. EHRs bring a patient's total health information together in one place and ensure that information is always current and relevant, providing clinicians with past medication trials and treatment, including adverse drug reactions. While an EHR can never take the place of clinical judgment and experience, it does actively provide options and explanations that improve the clinician's efficiency and compliance with accepted practice guidelines. Electronic health record systems reduce the amount of time clinicians spend locating and documenting patient care and solve the problem of illegible handwritten notes and physician orders.

Project Description:

CDHS, in cooperation with the Governor's Office of Information Technology (OIT), is requesting funds to replace the existing electronic health information and billing systems for its two State-operated, acute-care, inpatient psychiatric hospitals at Fort Logan and Pueblo with a comprehensive and integrated EHR, inclusive of Lab, Pharmacy, and Dietary systems. This project would replace a number of separate, loosely integrated systems, including some constructed in Microsoft Access, and result in the implementation of a modern, comprehensive, fully-automated, EHR that is fully integrated with all necessary clinical, operations and financial modules and systems and is compliant with meaningful-use requirements. The two psychiatric hospitals (451 beds at Pueblo and 94 beds at Fort Logan) currently utilize a web-based dietary system (Vision's Carex system); legacy pharmacy (OPUS-ISM) and lab (Multidata) systems on local servers; a primary health information system (NetSmart's Avatar) on a local server for Admission/Discharge/Transfer (ADT), diagnostics, non-pharmacy billing, legal commitment records, some scheduling, seclusion and restraint, and medication variances; and multiple Microsoft Access databases for additional data capture and reporting.

This request is to implement a comprehensive solution that includes:

- EHR, including, but not limited to, all modules and functions required to meet the current and pending meaningful-use standards (e.g., physician order entry, robust clinical decision support, assessments, care plans, discharge planning, patient portal, Health Information Exchange (HIE) interface, full integration with lab, pharmacy and dietary components, billing, financial analysis and reporting, regulatory compliance, behavior interventions, diagnostic and medical history and treatments, document storage and retrieval, scheduling, medication reconciliation, clinical notes, electronic Medication Administration Record (eMAR), record-level audit capability, etc.);
- Point of care documentation for active treatment and implementation of an individualized care plan;

- A system for historical records retention (e.g. 10 years) archive systems that will comply with records management best practice; and
- A fully-hosted and web-based solution, wherein the EHR and the integrated systems reside securely
 off-site, without the need for OIT resources or support of application servers.

Increased network speed and wireless access to the EHR are essential. Since the EHR replaces the paper chart, access to medical information must be immediate, continuous and convenient. Therefore the request includes funds to establish a secure wireless network on both campuses. The request also includes electronic tablets to be used by physicians and other clinicians (to allow real-time order entry, chart updating, and medical information access while conducting groups and interacting with patients), as well as bar code scanning and labeling equipment to interface with the pharmacy and EHR system and eliminate medication transcription errors.

Since this proposal is considered a major information technology project, it includes a related Operating request for \$1,456,000 (\$728,000 each fiscal year) to hire a Project Manager, a Project Management Analyst, and an Independent Verification and Validation (IV&V) Consultant. The Project Manager and Project Management Analyst will be trained and experienced in the leadership and management of such projects from commencement to completion. The IV&V Consultant, typically an independent third party, will ensure that the system meets required specifications and that it fulfills its intended purpose.

Also included with the software vendor costs (and in addition to the purchase, install, hosting, and process re-engineering costs) is \$1,213,673 in FY 2014-15, and \$1,436,872 in FY 2015-16 for customization (based upon 20% of the software and wireless systems purchase and installation costs), in addition to the purchase, licensing, training, and all installation costs. While the solution will be commercial off-the-shelf (COTS) software, all EHR products are designed as highly-interfaced modules that are augmented by "soft-coding" development tools, so that developers can make the many detailed modifications and enhancements that are necessary before the system can be fully operational. The request assumes that these modifications will be done by the software vendor, rather than by State FTE or contracted staff, and therefore includes these costs during the first two years in Capital Construction, rather than in Operating.

Consequences if not Funded:

The Institutes could continue to operate with the current legacy systems and not meet the recommendations of the State Auditors, with a likely outcome of continued high rates for medication errors and no increase in efficiency, safety or clinical management. Staff would continue to use paper documents to record and reference virtually all patient information about individual patient psychiatric and medical treatment needs. History and treatment decisions would still be determined (and delayed) by having to look through the paper-based medical chart. Doctors' orders, clinicians' progress notes, and medication administration records would remain hand written; important medical documents would be photocopied, hand-routed and finally queued for filing into the chart before they could be seen and used; patient charts would remain difficult to locate as clinicians borrow them to write their updates; and analyses of the effectiveness of medications and therapies would require labor-intensive searches to compile the necessary information (a process that currently impedes most efforts of this kind).

As the State's community mental health centers and providers implement EHRs, and as the Department develops new behavioral health data systems, the Institutes would be unable to share vital electronic, clinical care information. Not funding the request delays the opportunity to improve the safe and effective

delivery of quality health care to patients while in the Institutes, and compromises the continuity of care between the Institutes and the community providers.

Operating Budget Impact:

In FY 2014-15, CDHS is requesting Operating funds to hire two FTE: one General Professional V Service Delivery Manager, and one General Professional IV Process Analyst for management and regulatory analyses. The cost for FTEs in FY 2014-15 is \$162,659.

In FY 2015-16, CDHS requests funds to hire three additional FTE (two Technician III staff for customer support and system maintenance, and a second Process Analyst as a General Professional III). The cost for FTEs in FY 2015-16 is \$966,598.

Following project completion, the cost for ongoing system development support will be met either by continued funding through the Operating Request for the \$1,436,872 applied above through the software vendor, or by contracted or hired FTE. The optimal approach will be jointly determined soon by OBH and OIT staff as the Operating Request is finalized.

Other Operating expenses include costs for in-state travel between Fort Logan and Pueblo, and Common Policy costs per FTE. These costs total \$24,122 in FY 2014-15, \$31,675 in FY 2015-16, and \$14,362 in subsequent years.

Following project completion, FY 2016-17 will see the discontinuance of the use of, and costs for, the legacy systems. This savings equals \$377,787 per year.

Assumptions for Calculations:

- Cost estimates for the EHR purchase, installation and maintenance are based upon amounts submitted by vendors in response to a published Request For Information (RFI). The estimates represent the midpoint between a well-integrated EHR solution with lowest annual cost (the most effective category of EHR at the lowest long-term cost) and a well-integrated EHR solution with next highest long-term cost. This approach establishes sufficient funding to implement a successful solution based upon the low-end of acceptable products while accounting for the unknown factors that cannot be addressed in an RFI for a large-scale automation project. The vendor features and costs identified through the RFI are included in the supporting attachments.
- Robust and well-integrated health information systems are: a) built around core functions that cannot be modified by purchasers, and b) include development tools that provide for soft-coding modifications and enhancements. The \$1,436,872 annual cost for required vendor enhancement represents 20% of the cost to purchase and install the EHR software and the wireless network. As an ongoing operating expense, this amount would vary from year to year, based upon the solution implemented and the need for complex enhancements.
- Vendor costs for training are based upon figures obtained during the RFI process of \$1,200 per day, and 60 days required across implementation.
- These estimates are based upon the current lease costs through the Governor's Office of Information Technology vendor, Hewlett Packard. The number per unit and location are included in the supporting attachments.
- These estimates are based upon current market rates determined via internet search, and the number required for the Mental Health Institute pharmacies, clinics and treatment units. The number per unit and location are included in the supporting attachments.

- These are based upon the current quotes from the CDHS Division of Facilities Management, and the number required per treatment unit, clinic and pharmacy. The number per unit and location are included in the supporting attachments.
- These estimates were provided by OIT and their wireless vendor and are based upon the square footage and construction of the floors that require wireless connectivity for timely access to the electronic medical information. The costs reflect a 20% increase for construction, wiring and establishing power for the wireless system. The floors and buildings identified for wireless communication are included in the supporting attachments.
- These assume the discontinuance of paying for the projected expenses for the current dietary, lab, pharmacy and primary health information system licenses, vendor support fees, and server costs once the project is fully operational in FY 2016-17.
- The standard 5.0% rate for technology project contingencies is applied.

OIT has reviewed and provided conditional approval of this request, with the understanding that some technical issues require further investigation by OIT, and the outcome of those investigations may cause a revision to the calculations and an increase in the requested funds. These investigations will be completed within 30 days, and any changes resulting from those investigations will be forwarded immediately to the Office of State Planning and Budget (OSPB). Below are the technical concerns identified by OIT that require further investigation. (Note: OIT Leadership has reviewed the details for the wireless cost estimates, has stated that their initial concerns below have been addressed, and that the estimates provided in the request by the vendor MSN for wireless infrastructure, security software, architecture are appropriate. OBH is seeking written confirmation from OIT Leadership in this regard and will forward such to OSPB immediately upon receipt.)

- Regarding wireless estimates, was an air space or wireless footprint assessment conducted by MSN communication to determine the "scale" of the wireless footprint needed to provide wireless data coverage for these facilities. This is a good method for determining coverage concerns however, it does not address supporting wireless infrastructure concerns. This concern is confirmed with the identification of some additional funding for a supplement or contingency for potential hardware that might need to be purchased during the design or implementation phase.
- Critical security, access control, firewall, routing and Wireless LAN Control (WLANC) and or lobby ambassador hardware and software may not have been incorporated into the MSN financial projections.
- Existing wireless security and existing state wireless architectures may not have been incorporated into the wireless financial projections.
- Other supporting desktop software applications and server support systems essential to the use and
 management of a HIPAA secured wireless network for Electronic Health Information (ePHI) data
 may not have been included in the financial assessment including personal firewalls and potential
 virtual and/or remote desktop applications like Citrix or Microsoft Virtual Desktop Service (VDS).

| Additional Request Information | | | | | | |
|---|--|------|-----------------|--|--|--|
| Date of project's most recent program plan: | 1/23/2013 for the Scope of Work; 2/22/2013 for the published Request For Information (RFI) | | | | | |
| Request 6-month encumbrance waiver? | ĭ Yes | | No | | | |
| New construction or modification? | ⊠ New | | Renovation | | | |
| | ☐ Expansion | | Capital Renewal | | | |
| Total Estimated Square Footage | ASF | 250 | GSF | | | |
| Is this a continuation of a project appropriated in a prior year? | □ Yes | · 区. | No · | | | |
| If this is a continuation project, what is the State Controller Project Number? | NA | | | | | |

| Steps to be completed | Start Date | Completion Date |
|---|------------|-----------------|
| Expand business requirements with stakeholders | 9/1/2013 | 2/28/2014 |
| Issue Request for Proposal | 3/1/2014 | 3/31/2014 |
| Select EHR vendor | 4/1/2014 | 4/30/2014 |
| Interim purchase order / contract negotiation | 5/1/2014 | 7/31/2014 |
| Infrastructure improvements | 7/1/2014 | 9/30/2014 |
| Software implementation, and initial customization and training (by major components) | 7/1/2014 | 12/31/2015 |
| Closing customization and training | 1/1/2016 | 6/30/2016 |
| Maintenance and enhancement (ongoing) | 7/1/2016 | |

| | CC-IT | : CAPITAL CON | STRUCTION INF | ORMATION TEC | HNOLOGY REQ | UEST FOR FY 20 |)14-15 | |
|-------------------|--|--|------------------------------------|-------------------------------|--|-------------------|--|---------------------|
| | Agency of Institution: | Dapt of Labor and | Employment | Department or | Signature Institution Approvat | | Date 8-22- | |
| | Project Title | Workers' Compensi Migration and Mode | | | Signalure CCHE Approvat: | | | Date |
| | Project Year(s): | FY 2014 - FY 2017 | | | Signature OIT Approvat | | | Date |
| | Agency or Institution Priority Number: | | | | Signature OSPB Approvat; | | £/ | / \$1\$0/15 Date |
| | <u> </u> | | | Name and e-mail | address of preparer: | paul.vonriesemann | @state_co.us | |
| | vision? Yes No s, last aubmission dela | Total Project Costs | Total Prior Year Appropriations | Current Request FY 2014-15 | Year 2 Request | Year 3 Request | Year 4 Request | Year 5 Request |
| A. | Land Acquisition | | | | | | | |
| (1) | Land /Building Acquisition | 5 - | 5 - | \$ - | 5 - | s - | 5 - | 5 - |
| 日, | Contract Professional Services | | | | | | | |
| (1) | Consultants/Contactors | \$ 1,800,000 | \$ - | \$ 1,800,000 | s - | \$ - | \$ - | s - |
| | Quality Assurance | S - | 5 - | | s - | \$ - | \$ - | \$ - |
| · · | Independent Verification and Validation (IV&V) | \$ 250,000 | \$ - | \$ 250,000 | S - ' | \$ - | \$. | 5 - |
| | Training | 5 - | <u> </u> | \$ - | <u>s</u> - | <u> </u> | <u> \$ -</u> | \$ - |
| | Leased Space (Temporary) Feasibility Study | \$ - | <u>\$</u> - | \$ 50,000 | \$ - \$ - | \$ - \$ - | S - | \$ - |
| | Inflation for Professional Services | \$ 50,000 | \$ - | \$ 50,000 | \$ - \$ - | <u> </u> | \$. | S - |
| | Inflation Percentage Applied | | 0 00% | 0.00% | 0.00% | 0.00% | | 0.00% |
| | Other Services/Costs | \$ 100,000 | \$ - | \$ 100,000 | | \$ - | \$ - | \$ - |
| | Total Professional Services | \$ 2,200,000 | S - | \$ 2,200,000 | \$ - | 5 - | 5 - | \$ - |
| C. | Associated Building Constructio | | | | | | <u></u> | |
| 01 | (a) New (GSF): New \$ /GSF | \$ - | S. Start Start Start and Start | * Company of the Company | . इ. दिन राजन सुन्दिर्दर्श हाड | \$ - | | \$ |
| | (b) Renovate GSF: | s - 1 | \$ | \$ - | s - | \$ + | 5 • | 3 - |
| (2) | Renovate \$ /GSF | | | 1031 - 11 (10) 10 P | 5 2019 COMBBOOKS | raceas dagrees | NAMES OF STREET | |
| | Sile Work/Landscaping | स.संस्था स्थापने प्रकार के प्रमुद्धे प्राप्त | TABLETT, TENEBO | য়েন্দ্ৰ গোটা হৈছে ম | an an ann an Eigenbrei | (武士) 经基本 电极电阻 | COSPECTOR OF THE PARTY OF THE P | NEW TANKS OF SAME |
| | Other (Specify) | \$ - | \$ - | \$ | s - | 5 - | s - | |
| | inflation for Construction Inflation Percentage Applied | \$ - | 0.00% | \$ | 5 - 0.00% | \$ - | 55 - | 5 - |
| (6) | Total Construction Costs | \$ - | \$ - | \$ | <u> </u> | \$ - | 1 5 - | \$ - |
| D. | Software Acquisition | | | | | | | |
| | Software COTS | \$ - | 5 - | \$ | 5 - | 5 - | 5 . | ş - |
| | Software Built | \$ 3,300,000 | <u> </u> | \$ 3,300,000 | <u>s</u> . | s - | 5 - | 5 |
| | Inflation on Software | \$ - | \$ - | \$ 2000 | \$ - | \$ | \$ - | \$ - |
| (90) | inflation Percentage Applied | | 0,00% | 0.00% | 0.00% | 9.00% | 0.00% | 0.00% |
| (5) | Total Software | \$ 3,300,000 | \$ - | \$ 3,300,000 | \$ - | s - | \$ - | \$ - |
| E. | Equipment | | | | | | | |
| | Servers | 3 - | \$. | \$ 150,000 | \$ - | \$ - | \$. | \$ - |
| | PCs, Laptops, Terminals, PDAs | 5 - | 5 - | . \$ | s · | \$ - | s - | \$. |
| 441 | Printers, Scanners, Peripherals | \$ - | 5 - | \$ | 5 - | \$ - | \$ - | \$ - |
| | Network Equipment/Cabing Other (Specify) | \$ <u>-</u> | <u>\$</u> - | \$ - | <u> </u> | <u> </u> | 5 . | 5 - |
| | Miscellaneous | 5 - | <u> </u> | \$ - | 5 - | \$ - \$ - | 5 - | \$ - \$ - |
| (7) | Total Equipment and Miscellaneous Casts | \$ 150,000 | \$ | \$ 150,000 | 5 | \$ - | \$ - | \$ - |
| F. | Total Project Costs | \$ 5,650,000 | <u>s</u> - | \$ 6,850,000 | 5 - | \$ - | \$ - | 5 - |
| G. | Project Contingency | | | | | | | |
| m | 5% for New | \$ 282,600 | \$ - | \$ 282,500 | s - | \$ - | \$ - | 5 - |
| (2) | 10% for Renovation | s - | s - | \$ - | 5 - | 5 - | š - | \$ - |
| (3) | Total Contingency | \$ 282,500 | 5 - | \$ 282,600 | | \$ - | s - | \$ - |
| н. | Total Budget Request [F+G(3)] | \$ 5,932,500 | \$ - | \$ 5,932,500 | \$ - | \$ - | \$ - | \$ - |
| l. | Source of Funds | | | | | | | |
| | CCF | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | CF -Workers Comp Cash Fund #142 | \$ 5,932,500 | \$ - | \$ 5,932,500 | \$ - | \$ - | \$ - | \$ - |
| _ | RF | | \$ - | \$ - | \$ - | s - | \$ - | \$ - |
| | FF | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | |



DEPARTMENT OF LABOR AND EMPLOYMENT

FY 2014-15 Capital Construction Request

September 1, 2013

John W. Hickenlooper Governor

Ellen Golombeck Executive Director

Department of Labor and Employment Priority: 01 Workers' Compensation Mainframe Migration and Modernization Project

| Summary of Capital Construction Request | Total Funds | CCF | Cash Funds | Federal Funds |
|---|----------------|-----|---------------|------------------|
| FY 2014-15 | \$5,932,500 | \$0 | \$5,932,500 | \$0 |
| FY 2015-16 | \$0 | \$0 | \$0 | \$0 |
| FY 2016-17 | \$0 | \$0 | \$0 | \$0 |

Request Summary:

The Colorado Department of Labor and Employment (CDLE), specifically the Division of Workers' Compensation (DOWC) in cooperation with the Governor's Office of Information Technology (OIT) is requesting funding to migrate its current claims system off of the current 23-year old mainframe computer system and on to a modernized computer platform. Both agencies believe there are urgent reasons to begin this effort now as the mainframe is approaching its end of life. The Division is requesting \$5,932,500 in cash spending authority and no FTE for this project. Funding will be from fund balance from the Workers' Compensation Cash Fund with no anticipated fee or surcharge rate increase as a result of this request.

Background and Justification:

When a Colorado worker is injured in the line of work, the State has a responsibility to regulate benefits provided to the injured worker, pursuant to The Workers' Compensation Act of Colorado. The DOWC Claims Management System has the capability to provide on-demand electronic information for any reported claim within Colorado. This system provides information on individual claims in response to inquiries from insurance adjusters, employers, attorneys, claimants and executive governing staff. A complete chronological history of any work-injury claim submitted to the DOWC is archived within this computer system, including benefit summaries and orders.

The current DOWC mainframe system is 23-years old. As advancements in technology have accelerated within the last 20 years, resources available to maintain the mainframe environmental languages have become more limited. Many mainframe programmers have retired, or pursued other newer technology interests. It also limits the Divisions ability to assist its customers with on-demand or instant access to their information. This has limited the availability of mainframe programmers to support an outdated language like that used in the DOWC system (Adabase/Natural).

The DOWC Claims Management System is physically hosted at the General Government Computer Center, (GGCC) at 6th and Kipling in Denver. The Division of Workers' Compensation provides the aggregated funding for any support and maintenance of the existing system as determined by the OIT Common Policy funding allocation process. This includes any hosting application support from the Software Vendor Software (Software AG).

The existing mainframe application contract is effective through July 2014. This agreement was based on DOWC mainframe computer access needs. The agreement was developed by OIT in conjunction with the software vendor and allows for the hosting of various applications on the physical mainframe in order to meet the requirements of the DOWC Claims Management System. DOWC anticipates increased usage costs when the Software AG licensing is renewed in 2014. Other State agencies such as Human Services have completed a modernization releasing them from mainframe dependencies in order to avoid these increased costs

Three Colorado state agencies (Revenue, State Patrol and CDLE) are hosted on the GGCC mainframe and utilize the Software AG Adabase/Natural programming language. Human Services migrated away from the mainframe this year. As other state agencies formulate plans to migrate away from the mainframe, there is a viable risk of CDLE being the sole occupant on the mainframe. If CDLE does become the sole user of the mainframe the consequences would be increased costs for hosting maintenance and support, reduction in support staff (resulting in significant delays in vendor services), and ultimately a reduction of functionality. There would be a direct impact upon the DOWC business practices' which would jeopardize the Division's mission of ensuring enforcement of the Workers' Compensation Act, including timely claims processing, records maintenance, insurance compliance, cost containment and first-level dispute resolution.

Project Description:

The implementation and delivery of the next generation DOWC system will require a multi-year effort and must be completed before problems reach critical levels. Each phase of this overall effort will be treated as a separate phase, and each will be fully implemented in the "production" environment before the next modernization phase begins. This approach limits the implementation risk.

Proof of Concept. The objective of the Proof of Concept is to enable the vendor to utilize the proprietary software utilities to examine the legacy code and determine the scope of the migration effort. This analysis will provide a high level estimate of the duration involved for the migration. The estimated proof of concept cost is \$50,000 and will precede the migration development effort. It is estimated this effort will take two - three months.

Phase I Migration. The first phase of the effort will be of the migration of the current DOWC ADABAS/Natural away from its legacy mainframe platform to a contemporary platform. Apart from a new database and operating environment, the migrated system will be functionally equivalent to the existing system. Migration refers to re-writing the DOWC legacy system to a modern programming language and hardware platform.

The goal of legacy transformation is to retain the value of the legacy assets on the new platform and eliminate the risk and cost threats of the legacy mainframe. The expectation is that DOWC will be on a new technology platform as a functional equivalent system. This new system can then be aligned more closely to current and future business needs through the addition of new functionality. Other state departments exchange data with DOWC, including the newly modernized ACSES program. Several of these department have/or are in the process of their own modernization projects which will benefit

DOWC as well as other state agencies that exchange data. The estimated migration cost for this first phase is on the order of \$1.3 million. It is estimated this effort will take six – eight months.

Phase II Modernization. The objective of Phase II involves customizing the technological landscape to accommodate the division's strategies, business intelligence, regulatory requirements and skills availability. The complete modernized system will integrate with the user community by delivering a solution that recognizes the importance of the essential business objectives and requirements in its design and implementation. This modernization employs current tools, methods, and technology to increase the effectiveness and efficiency in the DOWC program. DOWC and OIT considered evaluation of the commercial off-the-shelf (COTS) applications, but due to limited programming resources and risk of service interruptions by implementing these applications increases, this solution was abandoned. Modernization involves customizing the rapidly changing technological landscape to accommodate agency strategies, business intelligence, regulatory requirements, and skills availability. Enterprises must control operational costs while remaining competitive. Modernization of the existing Workers' Compensation legacy system platform, will offer the opportunity to do both. Estimated modernization cost for this phase is on the order of \$2 million. It is estimated this effort 12 – 18 months.

Expected Outcomes. The migration project will achieve the following benefits:

- DOWC system will be moved off the current mainframe operating system supported by Software AG
- The system will overcome its basic limitations with 23-year old technology
- The future cost of maintaining the DOWC system will be more consistent, and expected rise in current operating costs will have been averted
- The risk to the Workers' Compensation program and its ability to deliver essential services will be reduced

This migration and modernization project consolidates multiple language platforms into a singular statewide supported language environment. Workers' Compensation is among only a handful of agency business units currently housed on the GGCC/mainframe computer.

Measurements of success indicators will be uninterrupted delivery of services, resolution of existing backlogged programming requests, as well as stakeholder feedback. Further indication of success will be the ability to recruit and retain programming resources pertinent to the new modernized platform as well as elimination of manual work-around(s) and legacy vendor dependency. The Division currently oversees 115,000 claims.

In addition to the systems used by the Department of Labor and Employment (Workers' Compensation and Colorado Automated Tax System), Software AG hosts two other state agencies: Department of Revenue – Drivers Licenses System (DLS) and Department of Human Services' Automated Child Support Enforcement System (ACSES). The Colorado ACSES division has recently experienced success in pursuing a program similar to that proposed here, modernizing their legacy platform with the state awarded vendor Innowake International Inc. DOWC seeks to mitigate this risk by utilizing best practices and lessons learned from the Colorado Department of Human Services by mirroring the applicable variations to the project process, the modernization of the Automated Child Support Enforcement System (ACSES).

Innowake International Inc. has a proprietary modernization solution that has been successfully implemented within Colorado Department of Human Service Child Support Division. An active Request for Pricing (RFP) has been created and currently on file at OIT Headquarters. Any state agency wishing to modernize their ADABAS/Natural environment can utilize this state-awarded contract with Innowake.

Consequences if not Funded:

DOWC has the option to keep the system the same or to move toward securing a new RFP as well as evaluating a Commercial Off the Shelf (COTS) application. Each of these listed alternatives introduces more risk as well a longer duration to move forward in modernization

One primary identifiable risk inherent to the legacy mainframe environment is that as other modernization efforts are realized, the remaining operational and support costs are no longer shared by the all state agencies using the platform, but are now absorbed directly by the remaining few state agencies using the legacy system. DOWC does not wish to accept the risks associated with increasing operational costs along with increasingly limited resources for maintenance on the legacy platform. Remaining on the platform will undoubtedly create future constraints in the hiring of programmers and developers to support legacy applications

Operating Budget Impact:

This request has no impact to the Division's personal services or operating line items and no additional FTE are being requested as part of this request.

Assumptions for Calculations:

Estimated Project Costs:

- Data Migration and Modernization Vendor \$3,300,000
- Proof of Concept \$50,000
- Independent Verification and Validation (IV&V) \$250,000
- Disaster Recovery (DR) \$100,000
- Computer Servers \$150,000
- IT Professional Services \$1,800,000
- Project Contingency ~ \$282,500
- Total Project Estimated Cost (excludes on-going maintenance) \$5,932,500

It is estimated that this project will be no longer than 36 months.

Vendor Costs: \$3,300,000

- Migrate DOWC Data Management System Development
 It is assumed a Migration Vendor will begin work on October 2014.
- Migrate DOWC Date Management System Complete Implementation
 Development and implementation work associated with migration is completed and a traditional implementation of the migrated system begins.
- Begin DOWC Data Management System Modernization Development
 It is assumed a vendor will be hired to modernize the DOWC Data Management System during this fiscal year.

Proof of Concept:

This funding allows the vendor to utilize software to examine the code and properly scope the project.

Independent Verification and Validation (IV&V).

House Bill 1288 requires independent verification and validation (IV&V) done by a third party organization not involved in the development of the project. The verification is to determine whether user requirements are met along with ensuring that the project is structurally sound and built to required specifications. It is estimated the cost will be \$250,000 and is included in estimated project total.

Disaster Recovery.

In line with House Bill 1288, Disaster Recovery is mandated for all major IT projects. It is estimated the cost will be \$100,000.

Computer Servers.

The initial estimate from OIT Network Infrastructure was that this system would require from 4-6 virtual servers for the new environment servers to house system at an estimated cost of \$25,000 each for a total cost of \$150,000.

IT Professional Services

Project Manager 2,000 hours per year x 3 years @ \$80.00/hr = \$480,000 Business Analyst 2,000 hours per year x 3 years @ \$65.00/hr = \$390,000 Architect 2,000 hours per year x 3 years @ \$55.00/hr = \$330,000 Application Tester 2,000 hours per year x 3 years @ \$45.00h/hr = \$270,000 Application Conversion Specialists 2,000 hours per year @\$55.00/hr = \$330,000

Project Contingency:

The Division is requesting a 5% project contingency for the entire project for unexpected costs that may occur during implementation and is considered standard for IT projects.

Maintenance Support

This request does not include funding for on-going maintenance support after full system implementation. At this time, the Division believes it has three options for on-going maintenance: OIT will fully support the system – similar to its current role along with Software AG; Innowake will fully support the system for an unknown cost; or a combination of OIT staff and Innowake. The cost for OIT is part of the annual cost allocation process and we anticipate no change in funding if OIT maintains support. Current maintenance support CDLE receives from OIT is approximately \$600,000 annually and we expect it to be similar with this new system. If Innowake is chosen as the sole vendor for maintenance a request for additional funding will be done at such time, if needed. Therefore, until the Division has a clear picture of maintenance requirements no funding is being requested.

| ADDITIONAL REQUEST INFORMATION | | TT ATTOMOREMENT GOVERNMENT TO THE | | |
|---|---|--------------------------------------|---|-----------------|
| Date of project's most recent program plan: | | | | |
| Request 6-month encumbrance waiver? | 区 | Yes | ū | No |
| New construction or modification? | X | New | | Renovation |
| · | | Expansion | | Capital Renewal |
| Total Estimated Square Footage N/A | | ASF | | GSF |
| Is this a continuation of a project appropriated in a prior year? | | Yes | X | No |
| If this is a continuation project, what is the State | | | | |
| Controller Project Number? | | | | |

| Steps to be completed | Start Date | Completion Date |
|--|----------------|-----------------|
| Begin Developing Business Requirement | March 2014 | |
| Hire Project Manager | May 2014 | |
| Request Proof of Concept from Innowake | July 2014 | September 2014 |
| Begin Data Conversion | September 2014 | |
| Begin Phase I Migration | October 2014 | April 2015 |
| Test Migration | November 2014 | April 2015 |
| Phase I End-User Training | March 2015 | April 2015 |
| Begin Phase II Modernization | April 2015 | August 2016 |
| Test Phase II Modernization | May 2015 | August 2016 |
| Phase II End-User Training | July 2016 | August 2016 |
| Full System Acceptance | | September 2016 |

| | F NOT APPLICABLE) |
|---|--|
| Cash Fund name and number: | Workers' Compensation Cash Fund / 142 |
| Statutory reference to Cash Fund: | 8-44-112(7)(a) |
| Describe how revenue accrues to the fund: | Workers' Compensation Premium Surcharge—is paid by insurance companies based on the amount of workers' compensation premiums received in the state. The surcharge rate is set by rule annually in May to take effect in July, and is 1.27 percent of premiums. The funds collected are used for workers' compensation cost containment, the Workers' Compensation Division, and the Major Medical Insurance Fund and Subsequent Injury Fund. The director determines how the surcharge is distributed amongst the 4 benefitting areas. |
| Describe any changes in revenue | No changes to the surcharge rate are anticipated for this project. |

| collections that will be nece this project: | ssary to fund | | |
|---|---|--|--|
| FY 2012-13 Actual Ending Fund Balance | FY 2013-14 Projected Ending Fund Balance | FY 2014-15 Projected Ending Fund Balance with Project Approval | FY 2015-16 Projected Ending Fund Balance with Project Approval |
| \$26,291,023 | \$27,800,000 | \$25,800,000 | \$22,800,000 |

STATE OF COLORADO

GOVERNOR'S OFFICE OF INFORMATION TECHNOLOGY

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John W. Hickenlooper Governor Kristin Russell Secretary of Technology and State Chief Information Officer

To:

Matthew Blackmon

Budget Director, CDLE

From: Brenda Berlin Burda Berlin

CFO, OIT

Date: August 29, 2013

Re: Capital Construction Budget Request

OIT has reviewed the Capital Construction Budget Request document regarding a project to migrate and modernize the CDLE Workers' Compensation ADABAS/Natural mainframe computer system. This request aligns with the strategic direction of the Office of Information Technology and OIT formally approves the request for submission to the Office of State Planning and Budgeting and the Capital Development Committee.

Please contact me at (303) 764-7928 with any questions. Thank you.

